

AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A method of encrypting a digital television signal, comprising:

encrypting data representing an audio portion of the television signal according to a first encryption method to produce a first encrypted audio portion and encrypting a duplicate of the data representing the audio portion according to a second encryption method to produce a second encrypted audio portion; and

combining an unencrypted video portion of the television signal with the first and second encrypted audio portions to produce the encrypted digital television signal; and
transmitting the encrypted digital television signal comprising the unencrypted video portion and the encrypted first and second audio portions.

2. (Previously Presented) The method according to claim 1, wherein the encrypting comprises encrypting packets identified as audio packets.

3. (Original) The method according to claim 2, wherein the digital television signal complies with an MPEG standard, and wherein the audio packets are identified for encryption by a packet identifier (PID).

4. (Previously Presented) The method according to claim 2, wherein the digital television signal complies with a digital satellite service (DSS) transport standard, and wherein the audio packets are identified for encryption by a service channel identifier (SCID).

5. (Original) The method according to claim 2, wherein audio packets encrypted according to the first encryption method are assigned a first packet identifier and audio packets encrypted according to the second encryption method are assigned a second packet identifier.

6. (Previously Presented) The method according to claim 5, wherein the first packet identifier and the second packet identifier are referenced as primary elementary packet identifiers (PIDs) in a program map table (PMT).
7. (Previously Presented) The method according to claim 5, wherein the first packet identifier is referenced as a primary elementary packet identifier (PID) in a program map table (PMT) and the second packet identifier is referenced as a secondary elementary packet identifier (PID) in the program map table (PMT).
8. (Original) The method according to claim 5, wherein the first encrypted audio portion and the second encrypted audio portion are distributed over one of a terrestrial broadcast system, a satellite system and a cable system.
9. (Original) The method according to claim 8, further comprising distributing system information to provide locating information used to locate the first and second encrypted audio portions.
10. (Previously Presented) The method according to claim 9, further comprising combining encrypted system information with the video portion and first and second encrypted audio portions.
11. (Original) An electronic storage medium storing instructions which, when executed on a programmed processor, carry out the method of encrypting a television signal according to claim 1.
12. (Previously Presented) An encrypted television signal stored in electronic transmission readable-medium encrypted by the method according to claim 1.

13. (Currently Amended) A method of multiple encrypting a digital television signal, comprising:

encrypting data representing an audio portion of the television signal according to a first encryption method to produce a first encrypted audio portion;

encrypting a duplicate of the data representing the audio portion of the television signal according to a second encryption method to produce a second encrypted audio portion; and

combining the first encrypted audio portion and the second encrypted audio portion with an unencrypted video portion of the television signal to produce a multiple partially encrypted digital television signal; and

transmitting the multiple partially encrypted digital television signal comprising the unencrypted video portion and the first and second encrypted audio portions.

14. (Previously Presented) The method according to claim 13, wherein the multiple encrypting comprises encrypting packets identified as audio packets.

15. (Previously Presented) The method according to claim 14, wherein the digital television signal complies with an MPEG standard, and wherein the audio packets are identified for multiple encryption by a packet identifier (PID).

16. (Previously Presented) The method according to claim 13, further comprising distributing the multiple partially encrypted television signal over one of a cable system, a terrestrial broadcast system and a satellite system.

17. (Original) The method according to claim 16, further comprising transmitting system information to provide locating information used to locate the first encrypted audio portion.

18. (Original) The method according to claim 17, further comprising encrypting the system information.

19. (Original) The method according to claim 13, further comprising partially encrypting the unencrypted video portion of the television signal.

20. (Original) An electronic storage medium storing instructions which, when executed on a programmed processor, carry out the method of encrypting a television signal according to claim 13.

21. (Previously Presented) A multiple encrypted television signal stored in electronic transmission readable-medium encrypted by the method according to claim 13.

22. (Currently Amended) An encrypted digital television signal stored or conveyed on a machine readable medium, comprising:

a first encrypted audio portion, comprising data representing a clear audio portion encrypted under a first encryption method;

a second encrypted audio portion, comprising a duplicate of the data representing the clear audio portion encrypted under a second encryption method; and
an unencrypted video portion;

wherein the first and second encrypted audio portions are assembled together with the unencrypted video portion to produce the selectively multiple encrypted digital television signal; and

wherein the digital television signal complies with an MPEG standard, and wherein the first encrypted audio portion is comprised of packets identified by a first packet identifier (PID), and wherein the second encrypted audio portion is comprised of packets identified by a second packet identifier (PID).

23. (Previously Presented) The encrypted television signal according to claim 22, wherein the first and second encrypted audio portions comprise encrypted packets identified as audio packets.

24. - 27. (Cancelled)

28. (Currently Amended) A digital television receiver device, comprising:

a receiver receiving a dual partially encrypted television signal, the dual partially encrypted television signal comprising audio packets containing audio data encrypted under a first encryption algorithm and duplicate audio packets containing a duplicate of the audio data encrypted under a second encryption algorithm;

a decrypter that receives encrypted audio packets encrypted under the first encryption algorithm from the receiver and decrypts the encrypted audio packets; and

a decoder that receives and decodes the decrypted audio packets, and that receives and decodes unencrypted video packets to produce a television signal as an output signal suitable for play on a television receiver.

29. (Previously Presented) The digital television receiver device according to claim 28, wherein the receiver further receives and discards audio packets encrypted under a second encryption algorithm.

30. (Currently Amended) A cable system headend, comprising:

a first encryption system that encrypts data in audio packets using a first encryption algorithm;

a second encryption system that encrypts data in duplicates of said audio packets using a second encryption algorithm; and

means for distributing an output stream ~~a stream~~ of packets representing a dual partially encrypted television program over a cable television system, the stream of packets comprising video packets, audio packets encrypted under the first encryption

algorithm, and duplicates of said audio packets encrypted under the second encryption algorithm and system information packets.

31. (Previously Presented) The cable system headend according to claim 30, wherein the video packets are unencrypted.

32. (Previously Presented) The cable system headend according to claim 30, wherein the system information packets are unencrypted.

33. (Previously Presented) The cable system headend according to claim 30, wherein the video packets are partially encrypted.

34. (Previously Presented) The cable system headend according to claim 30, wherein the system information packets are encrypted.

35. (Currently Amended) A method of decoding a multiple partially encrypted television signal, comprising:

receiving a television signal having a multiple encrypted audio portion and a clear video portion, wherein the multiple encrypted audio portion comprises a first encrypted audio portion having audio data encrypted under a first encryption method and a second encrypted duplicate audio portion having a duplicate of said audio data encrypted under a second encryption method;

decrypting the first encrypted audio portion to produce a decrypted audio portion; and

decoding the decrypted audio portion and the clear video portion to produce a decoded television signal as an output signal.

36. (Original) The method according to claim 35, wherein the decoded signal is suitable for play on a television set.

37. (Previously Presented) The method according to claim 35, wherein the first encrypted audio portion is identified by a first packet identifier (PID) associated with a first decryption algorithm used for decrypting the first encrypted audio portion and the second encrypted audio portion is identified by a second packet identifier (PID) associated with a second decryption algorithm used for decrypting the second encrypted audio portion.

38. - 39. (Cancelled)

40. (Previously Presented) The method according to claim 37, wherein the first PID is a secondary PID and wherein the second PID is a primary PID.

41. (Previously Presented) The method according to claim 37, wherein the first PID is a primary PID and wherein the second PID is a secondary PID.

42. (Previously Presented) The method according to claim 35, carried out in one of an integrated circuit and a programmable logic device.

43. (Previously Presented) The method according to claim 35, carried out in one of an application specific integrated circuit and a field programmable gate array.

44. (Original) The method according to claim 35, carried out in a television device.

45. (Original) The method according to claim 35, carried out in a television set-top box.

46. (Currently Amended) A method of decoding a partially encrypted television signal, comprising:

receiving a television signal having a first encrypted audio portion, a second encrypted audio portion and a clear video portion, the first audio portion being identified by a first packet identifier (PID), and the second audio portion being identified by a second PID, the second audio portion comprising data that is a duplicate of data contained in the first audio portion when the first and second audio portions are unencrypted;

discarding the second encrypted audio portion by PID filtering;

decrypting the first encrypted audio portion to produce a decrypted audio portion; and

decoding the decrypted audio portion and the clear video portion to produce a decoded output signal.

47. (Original) The method according to claim 46, wherein the decoded signal is suitable for play on a television set.

48. (Original) The method according to claim 46, wherein the first PID is a secondary PID and wherein the second PID is a primary PID.

49. (Original) The method according to claim 46, wherein the first PID is a primary PID and wherein the second PID is a secondary PID.

50. (Original) The method according to claim 46, carried out in an integrated circuit.

51. (Previously Presented) The method according to claim 46, carried out in one of an application specific integrated circuit and a field programmable gate array.

52. (Original) The method according to claim 46, carried out in a television device.

53. (Original) The method according to claim 46, carried out in a television set-top box.

54. (Currently Amended) A method of multiple encrypting a digital television signal, wherein the television signal includes an elementary data stream and digital television system information (SI) data, comprising:

duplicating the SI data to produce a duplicate SI data;

encrypting the SI data under a first encryption system to create a first encrypted SI data;

encrypting the duplicate SI data under a second encryption system to create ~~create~~ a second encrypted SI data;

forming a partially multiple encrypted digital television signal comprising:

the elementary data stream in an unencrypted form; and

the SI data encrypted under the first encryption system; and

the SI data encrypted under the second encryption system; and

transmitting the partially multiple encrypted digital television signal.

55.-56. (Cancelled)

57. (Previously Presented) The method according to claim 54, further comprising distributing the partially multiple encrypted television signal over one of the following: a cable system, a terrestrial broadcast system and satellite system.

58. (Previously Presented) The method according to claim 57, wherein the first encrypted SI data and the second encrypted SI data are distributed in a different band than that used to distribute the elementary data stream in the unencrypted form.

59. (Previously Presented) The method according to claim 57, further comprising distributing the partially multiple encrypted television signal over one of the following: a cable system, a terrestrial broadcast system and satellite system.

60. (Previously Presented) The method according to claim 59, wherein the first encrypted SI data and the second encrypted SI data are distributed in a different band than that used to distribute the elementary data stream in the unencrypted form.

61. (Original) An electronic storage medium storing instructions which, when executed on a programmed processor, carry out the method of encrypting a digital television signal according to claim 54.

62. (Previously Presented) An encrypted digital television signal stored in electronic transmission readable-medium encrypted by the method according to claim 54.

63. (Currently Amended) A partially multiple encrypted digital television signal stored or conveyed on a machine readable medium, comprising:

an unencrypted elementary data stream; and

digital television system information (SI) data encrypted under a first encryption system to create first encrypted SI data and a duplicate of the SI data encrypted under a second encryption method to create second encrypted SI data, and

wherein the unencrypted elementary data stream is modulated to a first frequency band and wherein the first encrypted SI data are modulated to a second frequency band.

64.-65. (Cancelled)

66. (Currently Amended) The partially multiple encrypted digital television signal according to claim 63, wherein the unencrypted elementary data stream is modulated to a first frequency band and wherein the second encrypted SI data are modulated to a second frequency band.

67. (Currently Amended) A television set-top box, comprising:

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a receiver that receives a television signal comprising unencrypted content and multiple encrypted digital television system information data comprising duplicate system information data encrypted under at least a first encryption method and a second encryption method;

a decrypter that decrypts the system information data encrypted under the first encryption method to create decrypted system information data; and

a decoder that decodes the unencrypted content to produce an output signal.

68. (Previously Presented) The television set-top box according to claim 67, wherein the content is decoded according to the decrypted system information.

69. (Previously Presented) The television set-top box according to claim 67, wherein the multiple encrypted system information data includes channel identifier information for identifying the content.

70. (Previously Presented) The television set-top box according to claim 67, wherein the multiple encrypted system information data are received in an out of band receiver.

71. (Previously Presented) The television set-top box according to claim 68, wherein the multiple encrypted system information data are received in an in-band receiver.

72. (Currently Amended) A method of encrypting a television signal, comprising:

encrypting data representing an elementary stream of the television signal according to a first encryption method to produce a first encrypted elementary stream; and

encrypting a duplicate of the data representing the elementary stream according to a second encryption method to produce a second encrypted elementary stream; and

combining the first and second encrypted elementary streams with an unencrypted elementary stream to produce the encrypted television signal, wherein the

unencrypted elementary stream is not a duplicate of the first and second elementary stream; and

transmitting the encrypted television signal comprising the first and second encrypted elementary streams and the unencrypted elementary stream.

73. (Previously Presented) The method according to claim 72, further comprising distributing an unencrypted video portion of the television signal along with the first and second encrypted elementary streams, wherein, the unencrypted video portion comprises the unencrypted elementary stream.

74. (Original) The method according to claim 72, wherein the television signal is a digital television signal, and wherein the encrypting comprises encrypting packets identified as one of audio elementary stream packets, video elementary stream packets and system information elementary stream packets.

75. (Original) The method according to claim 74, wherein the digital television signal complies with an MPEG standard, and wherein the elementary stream packets are identified for encryption by a packet identifier (PID).

76. (Currently Amended) A method of multiple encrypting a television signal, comprising:

encrypting data representing a selected elementary stream of the television signal according to a first encryption method to produce a first encrypted elementary stream;

encrypting a duplicate of the data representing the selected elementary stream of the television signal according to a second encryption method to produce a second encrypted elementary stream; and

combining the first encrypted elementary stream and the second encrypted elementary stream with at least one unencrypted elementary stream of the television signal to produce a partially multiple encrypted television signal; and
transmitting the partially multiple encrypted television signal comprising the first encrypted elementary stream, the second encrypted elementary stream and the at least one unencrypted elementary stream.

77. (Previously Presented) The method according to claim 76, wherein the television signal is a digital television signal, and wherein the multiple encrypting comprises multiple encrypting packets identified as the selected elementary stream packets.

78. (Original) The method according to claim 76, wherein the digital television signal complies with an MPEG standard, and wherein the selected elementary stream packets are identified for encryption by a packet identifier (PID).

79. (Previously Presented) The method according to claim 76, further comprising distributing the partially multiple encrypted television signal over one of a cable system, a terrestrial broadcast system and a satellite system.

80. (Previously Presented) The method according to claim 76, wherein the television signal is a digital television signal, and wherein the multiple encrypting comprises multiple encrypting packets identified as one of audio elementary stream packets, video elementary stream packets and system information elementary stream packets.

81. (Original) An electronic storage medium storing instructions which, when executed on a programmed processor, carry out the method of encrypting a television signal according to claim 76.

82. (Previously Presented) An encrypted television signal stored in electronic transmission readable-medium encrypted by the method according to claim 76.

83.-85. (Cancelled)

86. (Currently Amended) A method of encrypting a television signal, comprising:
encrypting data representing a video portion of the television signal according to a first encryption method to produce a first encrypted video portion;
encrypting a duplicate of the data representing said video portion according to a second encryption method to produce a second encrypted video portion; and
combining an unencrypted audio portion of the television signal with the first and second encrypted video portions; and
transmitting the encrypted television signal comprising the first and second encrypted video portions and the unencrypted audio portion.

87. (Previously Presented) The method according to claim 86, wherein the television signal is a digital television signal, and wherein the encrypting comprises encrypting packets identified as video packets.

88. (Previously Presented) The method according to claim 87, wherein the digital television signal complies with an MPEG standard, and wherein the video packets are identified for encryption by a packet identifier (PID).

89. (Previously Presented) The method according to claim 87, wherein the digital television signal complies with a digital satellite service (DSS) transport standard, and wherein the video packets are identified for encryption by a service channel identifier (SCID).

90. (Previously Presented) The method according to claim 87, wherein video packets encrypted according to the first encryption method are assigned a first packet identifier and video packets encrypted according to the second encryption method are assigned a second packet identifier.

91. (Previously Presented) The method according to claim 90, wherein the first packet identifier and the second packet identifier are referenced as primary elementary packet identifiers (PIDs) -in a program map table (PMT).

92. (Previously Presented) The method according to claim 90, wherein the first packet identifier is referenced as a primary elementary packet identifier (PID) in a program map table (PMT) and the second packet identifier is referenced as a secondary elementary packet identifier (PID) in the program map table (PMT).

93. (Previously Presented) The method according to claim 90, wherein the first encrypted audio portion and the second encrypted audio portion are distributed over one of a terrestrial broadcast system, a satellite system and a cable system.

94. (Previously Presented) The method according to claim 93, further comprising distributing system information to provide locating information used to locate the first and second encrypted video portions.

95. (Previously Presented) The method according to claim 94, further comprising combining encrypted system information with the audio portion and the first and second encrypted video portions.

96. (Previously Presented) An electronic storage medium storing instructions which, when executed on a programmed processor, carry out the method of encrypting a television signal according to claim 86.

97. (Previously Presented) An encrypted television signal stored in electronic transmission readable-medium encrypted by the method according to claim.

98. (Currently Amended) A method of multiple encrypting a television signal, comprising:

encrypting data representing a video portion of the television signal according to a first encryption method to produce a first encrypted video portion;

encrypting a duplicate of the data representing said video portion of the television signal according to a second encryption method to produce a second encrypted video portion; and

combining the first encrypted video portion and the second encrypted video portion with an unencrypted audio portion of the television signal to produce a multiple partially encrypted television signal; and

transmitting the multiple partially encrypted television signal comprising the first and second encrypted video portions and the unencrypted audio portion.

99. (Previously Presented) The method according to claim 98, wherein the television signal is a digital television signal, and wherein the multiple encrypting comprises encrypting packets identified as video packets.

100. (Previously Presented) The method according to claim 99, wherein the digital television signal complies with an MPEG standard, and wherein the video packets are identified for multiple encryption by a packet identifier (PID).

101. (Previously Presented) The method according to claim 99, further comprising distributing the multiple partially encrypted television signal over one of a cable system, a terrestrial broadcast system and a satellite system.

102. (Previously Presented) The method according to claim 101, further comprising transmitting system information to provide locating information used to locate the first encrypted video portion.

103. (Previously Presented) The method according to claim 102, further comprising encrypting the system information.

104. (Previously Presented) The method according to claim 98, further comprising partially encrypting the unencrypted audio portion of the television signal.

105. (Previously Presented) An electronic storage medium storing instructions which, when executed on a programmed processor, carry out the method of encrypting a television signal according to claim 98.

106. (Previously Presented) A multiple encrypted television signal stored in electronic transmission-readable medium encrypted by the method according to claim 98.

107. (Currently Amended) A method of encrypting a digital television signal, wherein the digital television signal includes an elementary data stream and digital television system information (SI), comprising:

encrypting data representing the SI under a first encryption system;

encrypting a duplicate of the data representing said SI under a second encryption system;

forming a multiple partially encrypted digital television signal comprising:

the elementary data stream in an unencrypted form; and

the SI encrypted under the first encryption system, and the duplicate SI encrypted under the second encryption system; and

transmitting the multiple partially encrypted digital television signal comprising the elementary stream in unencrypted form and the SI information encrypted under the first encryption system and the duplicate SI information encrypted under the second encryption system.

108. (Cancelled)

109. (Previously Presented) The method according to claim 107, further comprising distributing the multiple partially encrypted television signal over one of the following: a cable system, a terrestrial broadcast system and satellite system.

110. (Previously Presented) The method according to claim 107, wherein the encrypted SI information and the duplicate encrypted SI information are distributed in a different band than that used to distribute the elementary data stream in the unencrypted form.

111. (Previously Presented) An electronic storage medium storing instructions which, when executed on a programmed processor, carry out the method of encrypting a digital television signal according to claim 107.

112. (Previously Presented) An encrypted digital television signal stored in electronic transmission readable-medium encrypted by the method according to claim 107.